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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/506,507	03/07/2005	Eiichiro Mizushima	040894-7088	2720	
9629	7590 12/12/2005		EXAM	INER	
MORGAN LEWIS & BOCKIUS LLP			WITHERSPOON, SIKARL A		
WASHINGTON, DC 20004		Y	ART UNIT	PAPER NUMBER	
	,		1621		
				DATE MAU ED: 12/12/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	10/506,507	MIZUSHIMA ET AL.			
Office Action Summary	Examiner	Art Unit			
	Sikarl A. Witherspoon	1621			
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with the c	correspondence address			
A SHORTENED STATUTORY PERIOD FOR REPI WHICHEVER IS LONGER, FROM THE MAILING I - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATION  .136(a). In no event, however, may a reply be tind  d will apply and will expire SIX (6) MONTHS from te, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1)⊠ Responsive to communication(s) filed on <u>07</u> .	<u>June 2005</u> .	· .			
3) Since this application is in condition for allow					
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.			
Disposition of Claims					
4)⊠ Claim(s) <u>1-8</u> is/are pending in the application	•	•			
4a) Of the above claim(s) is/are withdra	4a) Of the above claim(s) is/are withdrawn from consideration.				
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-5</u> is/are rejected.	•				
7)⊠ Claim(s) <u>6-8</u> is/are objected to.					
8) Claim(s) are subject to restriction and	or election requirement.				
Application Papers	•	•			
9) The specification is objected to by the Examir	ner.				
10) ☐ The drawing(s) filed on is/are: a) ☐ ac	cepted or b) objected to by the	Examiner.			
Applicant may not request that any objection to th	e drawing(s) be held in abeyance. Se	e 37 CFR 1.85(a).			
Replacement drawing sheet(s) including the corre					
Priority under 35 U.S.C. § 119	·				
12)⊠ Acknowledgment is made of a claim for foreig	un priority under 35 U.S.C. & 119(a	)-(d) or (f)			
a)⊠ All b)□ Some * c)□ None of:	in priority under 55 5.5.5. § 1,15(a	, (4) 5. (1).			
1.☐ Certified copies of the priority docume	nts have been received.				
2. Certified copies of the priority document		ion No			
3. Copies of the certified copies of the pri					
application from the International Bure					
* See the attached detailed Office action for a lis		ed.			
Attachment(s)	a Marie San	. (DTO 412)			
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> </ol>	4) 🔲 Interview Summary Paper No(s)/Mail D				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date	a. 🗀	Patent Application (PTO-152)			

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States

Claims 1, 2 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Schulz et al (US 6,037,482).

Shultz et al disclose in example 33 (col. 9, lines 43-52) a process wherein propargyl alcohol is reacted with water and a triphenylphosphine gold (I) methyl catalyst, in the presence of methanesulfonic acid, to produce hydroxyacetone. At column 5, lines 17-21 Shultz et al state that the procedure can be carried out without the addition of a solvent, using the nucleophile and/or alkyne as the reaction medium, i.e., the alkyne or acid can themselves be considered the reaction solvent. Shultz et al therefore anticipate the instant claims.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shultz et al.

The instant claims further limit the process of the present invention to the alkyne reactant being a dialkyne, and to the organic solvent being an alcohol.

Shultz et al do not recite any examples of reactants having more than one carbon-carbon triple bond.

However, the examiner takes the position that it would have been obvious, absent a showing or evidence to the contrary, that the hydration or alkynes taught by Shultz et al could be employed for compounds having more than one site of unsaturation. Further, the examiner contends that it would have been obvious to a person of ordinary skill to increase the ratio of water to starting material and the concentration of acid, if so desired, in order to provide reaction conditions that would effectively hydrate each site of unsaturation on such a starting compound.

With regard to the alcohol solvent, example 33 does not make use of an alcohol solvent; however, the specification teaches that nucleophilic agents such as alcohols, acids, and hydrogen halides can be employed for the addition to alkynes (col. 3, lines 51-61). It therefore would have been obvious to a person of ordinary skill in the art to practice the hydration reaction taught by Shultz et al using any of said compounds, i.e., an alcohol as nucleophile, which, at column 5, lines 17-22 Shultz et al state can be employed as the reaction medium.

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Claims 6-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 5 and 6 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claims. See MPEP § 608.01(n).

The examiner would like to suggest that applicants amend the specification to include the continuity data when responding to this office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sikarl A. Witherspoon whose telephone number is 571-272-0649. The examiner can normally be reached on M-F 8:30-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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SIKARL A. WITHERSPOON PATENT EXAMINER